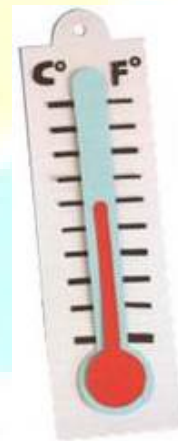


## Getting the Temperature Right

Low indoor temperatures are connected with a number of health issues and most people in the UK spend more than 90% of time indoors. The link between fuel poverty and health has often been examined. Professor Christine Liddell, of the University of Ulster, reported in 2008 that every £1 spent on improving energy efficiency saved the NHS 42 pence.

Decreasing indoor temperature below the comfort zone progressively influences the respiratory, cardiovascular and thermoregulatory systems and consequently the maintenance of good health.

- 18-24°C** The comfort zone, no risk to sedentary, healthy people
- ↓ **16°C** Increasing risk of respiratory disorders
- ↓ **12°C** Cardiovascular strain, increased blood pressure and viscosity
- ↓ **9°C** Failing thermoregulation and risk of hypothermia, after two hours exposure as the deep core body temperature falls.



The start of discomfort is likely to indicate the commencement of health risks, so that the temperatures required for comfort and for maintaining health are broadly the same.

**For comfort and health, the temperature of the main occupied room should average 21°C. For other areas such as bedrooms, bathrooms and halls 18°C is recommended.**

Those who might need higher temperatures are the elderly; people with a long-term illness and those who are disabled. Restricted mobility inevitably results in more time spent in the home and the reduced level of activity means that a higher temperature is needed to achieve comfort.

An important point to note is that many very old people find it harder to detect temperature changes than other age groups. In some cases, temperatures of **15-16°C may not be experienced as 'cold'** by an old person but may nevertheless be injurious to health.

Ensuring the home is adequately heated is very important. Inadequate heating can contribute to other problems in housing which affect health, namely dampness and condensation: see Factsheet 7.c

